

REMARKS

Claims 1-17 are pending in the application. Claim 1 has been amended to incorporate the limitation of claim 4, claim 4 has been canceled, and claims 10 and 13-17 have been withdrawn, leaving claims 1-3, 5-9, and 11-12 for consideration upon entry of the present amendment. Applicant respectfully requests reconsideration in view of the amendment and remarks submitted herewith.

Claims 1-3, 5, 8, 11, and 12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Tamaki, et al. (US 6,132,198) ("Tamaki") in view of Inaba, et al. (US 4,895,505) ("Inaba"). Claims 4 and 9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Tamaki in view of Inaba and further in view of EP 361670. Claim 6 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Tamaki, in view of Inaba and further in view of Linearmotoren LinMot P. Claim 7 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Tamaki, in view of Inaba and further in view of New Linear Motors and its applications.

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing that all elements of the invention are disclosed in the prior art; that the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combine references; and that the proposed modification of the prior art must have had a reasonable expectation of success, determined from the vantage point of the skilled artisan at the time the invention was made. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970); *Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d 1016, 1023 (Fed. Cir. 1996).

Even assuming that all elements of an invention are disclosed in the prior art, an Examiner cannot establish obviousness by locating references that describe various aspects of a patent applicant's invention without also providing evidence of the motivating force which would have impelled one skilled in the art to do what the patent applicant has done. *Ex parte Levengood*, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. Int. 1993). The references, when viewed by

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themselves and not in retrospect, must suggest the invention. *In Re Skoll*, 187 U.S.P.Q. 481 (C.C.P.A. 1975). In this case, there is no teaching in the cited art to combine the references in an attempt to produce the claimed invention and in fact, the references teach away from such combination.

Additionally, the MPEP states that "The proposed modification cannot render the prior art unsatisfactory for its intended purpose" and that "The proposed modification cannot change the principle of operation of a reference." MPEP §2143.01.

As explained above, claim 1 has been amended to include the limitation of claim 4, which includes a third cylinder. The Examiner states that Tamaki and Inaba teach all of the limitations of claim 4, except the third cylinder. Thus, respectfully, the applicant has traversed the rejection with regards to claims 1-3, 5, 8, 11, and 12.

The Examiner asserts that Tamaki as modified by Inaba uses a magnet and stator combination made up of two cylinders, and that using a magnet and stator combination made up of three cylinders to provide reciprocal motion is well known in view of EP 361670. Applicant respectfully traverses. The electromagnetic actuator described in EP 361670 is a passively acting actuator. The actuator in EP 361670 must produce a constant force to minimize deviation of a cylinder out of a middle position. However, the electric drive units in the instant invention cannot have such a force restricting the rotor from moving out of a middle position. The purpose of the electric drive units in the instant invention is to move the rotor such that it will be employed as a driving force, for instance for an injection means. Thus, because EP 361670 teaches a actuator that minimizes the deviation of a cylinder, in other words the actuator is acting as a damper, and because Tamaki and Inaba both teach drive units (not dampers), it is clear that there is no suggestion to combine the teachings of EP 361670's damper with the drive units of Tamaki and Inaba.

Additionally, EP 361670 requires several relay brushes 80b, ground brushes 80c and control drive brushes 80a which are used to control the reaction of the magnetic flux when the magnets 58 are moved from a middle position.. Such an arrangement would present considerable problems with respect to a linear motor as taught in Tamaki and Inaba, because the brushes 80

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would start cogging the linear motor and provide other problems with accurate positioning of the linear motor. This, therefore, is another reason why there is no suggestion to combine EP 361670 with the linear motors of Tamaki and Inaba.

EP 361670 if combined with Tamaki would change the principle of operation of the Tamaki reference in violation of MPEP 2143.01. EP 361670 states that "the actuator assembly of the present invention is designed to provide the desired restorative forces with less magnetic material and less current than that provided by the type of strut assembly shown in the prior art application..." EP 361670 at column 6, lines 37-41 (emphasis added by this author). The desired restorative forces refer to the fact that EP 361670 teaches a damping mechanism, that seeks to restore a cylinder to a middle position. However, Tamaki requires a driving force, to move a moveable platen 28. If a restorative force was to be used, then the movements of the moveable platen 28 would be minimized by the restorative force. Thus, the principle of operation would be changed if EP 361670 were combined with Tamaki, and the proposed modification would render Tamaki unsatisfactory for its intended purpose.

Thus, because there is no suggestion to combine EP 361670 with Tamaki, the proposed modification would render Tamaki unsatisfactory for its intended purpose, and that the proposed modification would change the principle of operation of Tamaki, applicants respectfully request that the rejections as to claim 4 and 9 under 35 U.S.C. § 103(a) be withdrawn.

Claim 6 includes all of the limitations of claim 1. As explained above, Tamaki and Inaba do not teach all of the limitations of currently amended claim 1, which now includes the limitations of now cancelled claim 4. Moreover, Lincarmotoren LinMot P. does not cure the deficiencies of Tamaki and Inaba because Lincarmotoren LinMot P. does not show the use of a third cylinder. Accordingly, Applicants respectfully request that the rejection as to claim 6 under 35 U.S.C. § 103(a) be withdrawn.

Similarly, claim 7 includes all of the limitations of claim 1, and as explained above, Tamaki and Inaba do not teach all of the limitations of currently amended claim 1. Additionally, New Linear Motors does not cure the deficiencies of Tamaki and Inaba because New Linear Motors does not teach or show the use of a third cylinder. Accordingly, applicants respectfully

request that the rejection as to claim 7 under 35 U.S.C. § 103(a) be withdrawn.

In view of the foregoing, it is respectfully submitted that the instant application is in condition for allowance. Accordingly, it is respectfully requested that this application be allowed and a Notice of Allowance issued. If the Examiner believes that a telephone conference with Applicant's attorneys would be advantageous to the disposition of this case, the Examiner is cordially requested to telephone the undersigned.

In the event the Commissioner of Patents and Trademarks deems additional fees to be due in connection with this application, Applicant's attorney hereby authorizes that such fee be charged to Deposit Account No. 06-1130.

Respectfully submitted,

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